

AMENDMENTS TO THE CLAIMS

The Listing of Claims set forth below shall replace all prior versions and listings of claims in the application.

Listing of Claims:

What is claimed is:

1. (Withdrawn) An isolated and purified polypeptide comprising an amino acid sequence at least 85% identical to the amino acid sequence set forth in SEQ ID NO:3 or a biologically-active fragment thereof capable of intracellular cholesterol transport.
2. (Withdrawn) The isolated and purified polypeptide according to claim 1 wherein the amino acid sequence is that of SEQ ID NO:3.
3. (Withdrawn) An isolated and purified nucleic acid that specifically hybridizes under stringent conditions to either strand of a denatured, double-stranded nucleic acid encoding an amino acid sequence as set forth in SEQ ID NO:3.
4. (Withdrawn) The isolated and purified nucleic acid according to claim 3 wherein said denatured, double-stranded nucleic acid encoding an amino acid sequence as set forth in SEQ ID NO:3 is the nucleotide sequence of SEQ ID NO:1.
5. (Withdrawn) An expression vector comprising an isolated and purified nucleic acid according to claim 3.
6. (Withdrawn) A transformed host cell or organism comprising an isolated and purified nucleic acid according to claim 3.

7. (Withdrawn) A method of preparing an isolated and purified polypeptide comprising AeSCP-2 or fragments thereof, comprising the step of culturing a transformed host cell or organism of claim 6 under conditions conducive to expression of the polypeptide, and recovering the expressed polypeptide from the cell or organism in isolated and purified form.

8. (Currently amended) A method of identifying whether a compound is an agonist or antagonist of Aedes aegypti sterol carrier protein-2 (AeSCP-2) biological activity, comprising the steps of:

(a) incubating an AeSCP-2 polypeptide comprising the amino acid sequence set forth in SEQ ID NO:3 ~~or a biologically active fragment thereof~~ with a biological target in the presence of a compound; and

(b) measuring the ability of the compound to enhance or block the interaction between the AeSCP-2 polypeptide ~~or fragment thereof~~ and the biological target to thereby identify an agonist or antagonist effective in altering AeSCP-2 biological activity.

9. (Currently amended) [[A]] The method according to claim 8 wherein the biological target is cholesterol and the AeSCP-2 biological activity is cholesterol transport.

10. (Currently amended) A method for identifying compounds which bind to or interact with an Aedes aegypti sterol carrier protein-2 (AeSCP-2) polypeptide ~~or fragment thereof~~, comprising the steps of:

(a) contacting an AeSCP-2 polypeptide ~~or fragment thereof~~ with a compound to be screened under conditions to permit binding to or interaction between the compound and the AeSCP-2 polypeptide ~~or fragment thereof~~ to assess the binding to or interaction with the compound, such binding or interaction being associated with a

detectable signal in response to the binding or interaction of the AeSCP-2 polypeptide ~~or fragment thereof~~ with the compound; and

(b) determining whether the compound binds to or interacts with the AeSCP-2 polypeptide ~~or fragment thereof~~ by detecting the presence or absence of the signal generated from the binding or interaction of the compound with the AeSCP-2 polypeptide ~~or fragment thereof~~.

11. (Original) The method according to claim 10 wherein the AeSCP-2 polypeptide has the amino acid sequence set forth in SEQ ID NO:3.